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(12) **United States Patent**  
**Hansen**(10) **Patent No.: US 6,275,214 B1**  
(45) **Date of Patent: Aug. 14, 2001**(54) **COMPUTER PRESENTATION SYSTEM AND METHOD WITH OPTICAL TRACKING OF WIRELESS POINTER**5,712,658 \* 1/1998 Arita et al. .... 345/158  
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5,926,168 7/1999 Fan .(76) Inventor: **Karl C. Hansen**, 6821 Wildlife Dr.,  
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345/157, 179, 181(56) **References Cited**

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(57) **ABSTRACT**

A method for remotely controlling a computer having an associated screen for displaying output from the computer and having an internal cursor generated by the computer includes detecting at least one property of an external cursor relative to the screen and generating a command for the computer based on the at least one detected property of the external cursor. In one embodiment, the invention includes a computer connected to a projector which projects an image of the computer output onto an external screen. A camera is used to capture an image of the projected computer output. An optical pointer, such as a laser pointer, is used to generate and transmit an external cursor having various properties, such as color, shape, or intensity. The image captured by the camera is used to detect and process at least one property of the external cursor to generate a corresponding command or commands to control the computer. Commands may be used to emulate control of the computer typically provided by a pointing device such as a mouse or track ball.

**26 Claims, 2 Drawing Sheets**